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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,564	08/18/2006	Dalbir Sethi	60323-USA	2105

7590  
John M Sheehan  
FMC Corporation  
1735 Market Street  
Philadelphia, PA 19103

06/27/2007

EXAMINER
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KRECK, JOHN J

ART UNIT	PAPER NUMBER
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3673

MAIL DATE	DELIVERY MODE
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06/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p align="center">10/565,564</p>	<p>Applicant(s)</p> <p align="center">SETHI ET AL.</p>	
	<p>Examiner</p> <p align="center">John Kreck</p>	<p>Art Unit</p> <p align="center">3673</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-9, 15-20, and 24-34 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent number 6,569,353 to Giletto, et al.

Giletto describes the process including contacting the contaminant with a composition including persulfate and hydrogen peroxide. See column 2, lines 20-63.

RE claim 2: see 2:26-30.

RE claim 3: see 2:26-30.

RE claim 4: see 2:27.

RE claim 5: see example 1: .45mmol FeSO<sub>4</sub> and 4.5mmol falls squarely within the claimed range.

RE claim 6: see example 1.

RE claim 7: see example 1.

RE claim 8: see example 3.

RE claim 9: see example 3.

Re claim 15: it is apparent that the treatment must be either in-situ or ex-situ.

RE claim 16: see 5:34.

RE claims: 17-20 see 6:31-60.

Regarding independent claim 24:

Giletto plainly teaches a composition including persulfate and hydrogen peroxide:  
see example 1.

RE claim 25: see 2:26-30.

RE claim 26: see 2:26-30.

RE claim 27: see 2:27.

RE claim 28: see 2:27.

RE claim 29: see example 1: .45mmol FeSO<sub>4</sub> and 4.5mmol falls squarely  
within the claimed range.

RE claim 30: see example 1.

RE claims: 31-34 see 6:31-60.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giletto, et al.

RE claim 10, see in re Gibson, 39 F.2d 975, 5USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.).

RE claims 11-13: Official Notice is taken of the fact that it is well known to repeat additions of chemical reagents continuously and at time intervals, in order to ensure that the process is completed. It would have been obvious to one of ordinary skill in the art at the time of the invention to have repeated additions of persulfate and hydrogen peroxide.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giletto, et al. in view of JP2001-207224.

Giletto fails to describe the treating soil, rock, groundwater, wastewater, or process water. It is noted that Giletto is directed to destroying chemical weapon residue.

JP2001-207224 teaches the fact that chemical weapons are known to contaminate soil

It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Giletto process to soil, in order to decontaminate soil.

Art Unit: 3673

4. Claims 21-24 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giletto, et al. in view of U.S. Patent number 6,160,194 to Pignatello.

Giletto lacks the chelated metal.

Pignatello teaches the advantages of using chelated metal; including longer activity of the ferrous/ferric ions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Giletto process to have included chelated metal.

RE claims 22-24: see abstract.

RE composition claim 35: Giletto lacks the chelated metal.

Pignatello teaches the advantages of using chelated metal; including longer activity of the ferrous/ferric ions.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Giletto composition to have included chelated metal.

RE claims 36-38 see abstract.

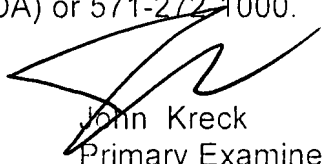
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042.

The examiner can normally be reached on Mon-Thurs 530am-2pm; Fri: telework.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John Kreck  
Primary Examiner  
Art Unit 3673

15 June 2007